

RELAP5-3D Auxiliary Tools 2015 Update

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Introduction: Updates and Upgrades and Plans

- RGUI
- PYGI
- R5EXEC

RGUI Plans

- No Updates or Upgrades to report
- Plans
 - Batch Execution Capability
 - Isometric Plotting.... REALLY

PYGI Bug Fixes

- A variable pvtnum was set to 20 and allowed to double allocated space to accommodate more volumes
 - Doubling logic was incorrect
 - Set it to 100 (since there are only 99 possible in RELAP5-3D).
- Issue with the multiple junctions and continuation lines
 - + for continuation lines is a known issue
 - Just list lines individually
 - On back burner as work around exists.
- Machine dependent binary for F90
 - Format was changed
 - Made modifications but work in RELAP5-3D is ongoing
 - More are likely needed to complete this task.

R5EXEC Updates and Plans

- Background
 - PVMEXEC utility written in 2005 by Walt Weaver
 - Uses PVM for the message passing interface
 - Couple RELAP5-3D to RELAP5-3D and other codes.
- Updates
 - R5EXEC (formerly known as PVMEXEC)
 - Updated all three programmers manuals
 - Updated the users guide
 - Modified the RELAP5-3D scripts and directories.
- Plans
 - PVM installed on Windows
 - Build R5EXEC for Windows release.

Summary of TODO list

- RGUI
 - Batch Execution
 - Plotting
- PYGI
 - Continue working binary file issues
 - Search for solution to the multiple junction input issue
- R5EXEC
 - Install PVM on Windows
 - Build R5EXEC for Windows
 - Test and provide in next released version
- Stay tuned....